



Submission regarding the National Food Security Strategy

the climate centre





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Food security is a complicated issue, covering social, economic, and environmental aspects at a local, national, and global scale. In addition to this, food security covers many areas of policy, such as national security, environment protection, and public health (Spencer 2024). To regulate this complex space, it is important that a national strategy is created which is informed by agreed definitions and terminology of what food security is (Spencer 2024). The need for a shared definition of food security across all levels of government is highlighted by government claims that Australia does not have a food security problem, despite many people not having consistent access to food in Australia (Spencer 2024). To deal with the complexity of food security policy and allow Australia to perform at an international standard, central responsibility for food security should be given to a Ministry of Food, as recommended by the 2024 parliamentary inquiry (Spencer 2025).

What actions could the strategy take to address challenges under these whole-of-system considerations?

Climate change and sustainability

Animal agriculture is damaging to the environment, with over 75 percent of Australia's agricultural emissions in 2023 coming from livestock (Climate Council 2024; Eassom et al. 2024). It is also responsible for a substantial amount of land clearing with one glass of dairy milk using nine times more land than plant-based milk (Climate Council 2024). Land clearing for animal agriculture releases carbon, removes carbon sinks, destroys habitats, degrades soil and creates biodiversity deserts by turning complex ecosystems into simplified monocultures. Agriculture is also identified as a threat for 24,000 of the 28,000 species on the IUCN Red List that are threatened with extinction (Plant Based Treaty 2023).

The National Food Security Strategy must consider climate change threats. Due to the increased frequency and severity of extreme weather events, intermittent food shocks will increase in frequency and severity, and therefore, a National Food Security Strategy should aim to increase Australia's ability to prepare for and respond to climate change threats to food security such as bushfires, floods and cyclones (Spencer 2024). Policy should be informed by reliable data on current levels of risk as well as past extreme weather events that have led to food system shocks, such as the 2019–20 summer bushfires (Spencer 2024).

In addition, shocks to the supply chain triggered by climate change exacerbated related natural disasters such as bushfires, cyclone or floods would require a need to prepare before these disasters occur (ACIL Allen 2022). Regional and Transport Planning for agriculture systems and communities should consider food production, distribution and retail of food products (ACIL Allen 2022) so Australian can better prepare for the inevitable. Food insecurity caused by climate change exacerbated event will impact the most vulnerable Australians first such as casual workers who lost jobs, temporary migrant workers and international students (Carey, Alexandra & Murphy 2022).



The Australian Government should also restrict, if not outright ban, live export of animals (Plant Based Treaty 2023). In addition to the cruelty associated with transporting animals, with millions having died from starvation or heat stress before reaching their destination, live exportation is also responsible for a large amount of emissions, with Australian live exports producing 1.8 million tonnes of CO₂ in 2009 alone (Plant Based Treaty 2023).

Building climate-resilient agriculture and food systems which are prepared to operate in a net-zero future can be achieved by prioritising:

- More ambitious policy targets to reduce carbon emissions, including more Federal funding to help agriculture and land sectors move towards net-zero (Oxford Economics, 2024).
- Strengthening regional partnerships and continuing to contribute to regional and global food security to ensure that we can continue to import food and other agricultural inputs (Department of Foreign Affairs and Trade, 2025).
- Committing more federal funding and support for research and development into alternative farming practices so that Australia can sustain robust agricultural productivity into the future, including into a net-zero future (Grattan Institute, 2021).
- Increasing crop diversification in farming systems (Mihrete and Mihretu, 2025).
- Investigating how to localise and decentralise food supply chains to reduce emissions and support farmers and rural communities (Carey, Murphy and Alexandra, 2022).

Addressing the problem of food waste can be supported by:

- Setting more ambitious food waste reduction targets than what is set out in the National Food Waste Strategy, with an associated implementation plan (CSIRO, 2023).
- Supporting food waste initiatives such as OzHarvest through greater funding commitments and partnerships (Department of the Environment and Energy, 2017).
- Support State, Territory, and local governments to adopt effective food waste strategies at the local level, including educating individuals on the climate effects of household food waste (Department of Climate Change, Energy, the Environment and Water, 2020).

People

The proposed policy should aim to strengthen Australia's food systems through increased financial assistance to support farmers, landowners and key stakeholders in the agriculture sector to promote the development of climate resilient and low-emissions agricultural technologies and practices (Grattan Institute, 2021), which intensify and diversify agricultural production so that food supply and farmers' incomes are sustained long into a net-zero future. Additional financial attention should be granted to other levels of the food supply including processing, transport, and distribution, where climate change may interrupt movement of food to consumers' plates (Mirzabev et al., 2023).



Community gardens are key in urban areas as infill developments takes away private gardening space. Community Gardens are often a free or otherwise affordable way to gain access to food that skips the global supply chain network (Humanity 2023). Volunteering in community gardens can lead to higher fruit and vegetable intake, positive psychosocial and community outcomes (Hume et al. 2022) for those involved in the growing and organising of food products. Community Garden can enhance the community resilience building improving both health and social capital.

Recognition of the public health effect of food insecurity, particularly on vulnerable population groups can be achieved by:

- Improving education outcomes in relation to nutrition and food preparation within priority population groups and delivering these in a culturally and linguistically sensitive manner where necessary (Australian Institute of Family Studies, 2020).
- Developing strategies to subsidise the cost of food for priority population groups who are most likely to experience food insecurity.
- Commit greater funding to food relief organisations such as Food Bank and OzHarvest (Department of the Environment and Energy, 2017).
- Increase access to financial counselling to tackle the economic causes and impact of food insecurity (Australian Institute of Family Studies, 2020).
- Incorporate a Climate in All Policies (CiAP) approach (Stein and Dorner, 2024) and Health in All Policies (HiAP) approach (Workman et al., 2024) to the monitoring and evaluation of policy targets, including utilisation of health impact assessments (HIAs).

Health and nutrition

The enhancement of plant-based agriculture can play a significant role in reducing greenhouse gas emissions, as well as an important role in enabling Australia's food security, and having economic and health benefits. Whole plants, or foods with large plant components such as bread, vegetable oils and cereals, constitute up to ninety percent of the human diet, and as already mentioned, make up for more than half of Australia's agriculture (ABARES 2025; United Nations 2019; Şerban et al. 2008). Across 2023 to 2024, Australian agriculture accounted for 10.8% of goods and services exports (\$71.5 billion in 2023-24), 2.4 percent of Australia's GDP, 5.9 percent of rural employment, and 2.2 percent of national employment (315,600 people in 2023-24) (ABARES 2025). Plant-based agriculture is also important for public health, with the National Health and Medical Research Council (2013) recommending that the predominant source of dietary energy comes from a diversity of fruit, vegetables, and grains in order for Australians to live longer, healthier, and happier lives (AIHW 2024).

The new federal policy should be, first and foremost, led by a Health in All Policies (HiAP) approach, as well as a Climate in All Policies approach (CiAP). A HiAP approach is a synergistic effort to recognise the health implications of policy decisions across all sectors (World Health Organisation, 2025). It is underutilised in Australian policy and legislation and can be achieved by mandating Health Impact



Assessments (HIAs) to measure the interrelatedness of policy decisions and broader health effects (Workman et al., 2024). HIAs may be advantageous in describing the interrelatedness of human health and climate change, as they can be used to evaluate climate change resilience in policy and projects and to assess the health co-benefits of climate change policies (Workman et al., 2024). Climate effects must likewise be factored into the development of this health policy, thereby building upon the concept of a Climate in All Policies (CiAP) approach (Stein and Dorner, 2024). The policy should also place food security in the context of public health by underpinning how policy must consider the social determinants of health, addressing the vulnerability faced by disadvantaged population groups to the issue of food insecurity.

The proposed policy must also address the impact of Australian diets and food consumption on the environment. Recent research suggests that a public health approach which promotes plant-based dietary changes according to healthy eating guidelines and evidence, has the power to reduce environmental pressures, nutrient deficiencies, and diet-related mortality more so than segregated climate and food security approaches (Springmann et al., 2018). Replacing animal-source foods with plant-based foods in high-income countries such as Australia can reduce premature mortality, and reduce environmental impacts such as greenhouse gas emissions, fertiliser application and cropland use. At the same time, substituting an animal-based diet for a plant-based diet may cause increased freshwater use (Springmann et al., 2018). This is where it is important for the Australian government to prioritise localised food supply chains, encouraging the consumption of seasonal, local and native produce where possible, and investing into climate-resilient farming which keeps drought management and resource protection at the forefront of its endeavours. Dietary guidelines and food legislation can therefore be altered in Australia to encourage a higher consumption of fruits, vegetables, legumes, and nuts, and to deter Australians from consuming excessive meat and dairy. Such changes have the power to alter production methods, technologies, commodity prices in Australia's food system and thereby shape environmental footprints and agricultural incomes (Springmann et al., 2018). Community food systems have also been found to address health and wellbeing by improving diets, developing social connection, promoting environmental stewardship and contributing to local economic development (VicHealth, 2024), and should be a focus of improving climate and nutrition outcomes in the policy.

Address the effect of dietary patterns and consumer demand on climate change by:

- Adjusting dietary guidelines and nutrition education, which has the potential to reduce greenhouse gas emissions (Feigin, et al., 2025).
- Target the effect of food marketing on dietary choices (Department of Health and Aged Care, 2022).
- Incorporating taxes on discretionary food items (Department of Health and Aged Care, 2022).
- Localising food systems by encouraging engagement with community gardens, school breakfast clubs, and providing education on growing and consuming seasonal produce (VicHealth, 2024).



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Disclaimer: The contents of this submission were taken and adapted from the Climate Centre's State of Policy report, relying on work by Luke Baré and Sophie Hunt.

About The Climate Centre

The Climate Centre is a volunteer-run charitable not-for-profit focused on building bridges between research, policy and communities. It achieves this by undertaking research relevant to local communities, providing digital materials and outreach initiatives that make it easier to interpret climate information and apply it to a local scale, as well as engaging in policy analysis and advocacy to government, and fostering conversations and understanding at individual, community, and national scales through its various projects.

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